

**SOLUTION FOR NATIONAL WATER SUPPLY &
DRAINAGE BOARD CUSTOMERS' PROBLEMS
IN COLOMBO CITY**

SAMBASIVAM LETCHUMANAMOHAN



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Master of Business Administration in Project Management

Department of Civil Engineering

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Abstract

Clean and adequate water is a basic and fundamental requirement of human beings. Focusing on customer requirement is particularly important, where several alternative sources and service providers are available. Customer satisfaction and good customer relationships are important in any business, which is also applicable to the NWS&DB in spite of state monopoly. A satisfied customer would assist by informing any pipe leaks in the distribution system and house connection promptly. This research aims to access the customer satisfaction levels of the NWS&DB customers, identify problems faced by the customers and suggest solutions in order to improve the intuitional and operational system. A questionnaire survey was conducted in 36 householders in Colombo South area who had complained to the NWS&DB.

The important problems identified in the customer's survey are insufficient pressure in the distribution system, inaccurate meter reading, delay to attend repair work and poor quality of repairs. The relevant NWS&DB Engineers were interviewed to collect reasons for the above mentioned problems and the following important human resources management problems were identified.

- Lack of self interest in the repair gangs
- Lack of authority/ funds, to procure sufficient number of equipment

The important reasons for the customers' problems include

- Minimum accountability of repairs as large number of the site gangs carry out the repair works in the whole city rather than a small number attending a specified area.
- Minimum proactive maintenance and repairs are carried out by the existing O&M section, due to lack of motivation
- At present the numbers of repair gangs are insufficient. The problem is worsened due to police requirement to carry out night work.

The important reasons for all customers' problems were analyzed in order to propose a feasible management option on par with the available industry practices. The solution for the problems is recommended as both long term and short term. As a long term solution, decentralization of repairs and O&M of distribution system, and an incentive scheme in order to motivate the workers have been recommended. In order to solve the immediate problem the recommended short term solution is outsourcing of development works and excess activities for which available staff are inadequate. Further recommendations have been made to improve meter reading activity.

Keywords: customers' problems in water supply distribution, management of water supply distribution.

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LIST OF ABBREVIATIONS

AGM	-Assistant General Manager
Addl. G.M.	- Additional General Manager
UFW	- Unaccounted for water
BOT	- Build-Operate-Transfer
CMC	- Colombo Municipal Council
DGM	- Deputy General Manager
EA	- Engineering Assistant
Eg	- Example

Lpcd	- Liters per person per capita per day
mgd	- million gallons per day
NWS&DB	- National Water Supply & Drainage Board
NRW	- Non-Revenue Water
O&M	- Operation & Maintenance
OIC	- Officer in Charge
OPD	- Operation and Development
PPP	- Private Public Partnership
UFW	- Unaccounted for water
PSP	- Private Sector Participation
PVC	- Poly Vinyl Chloride
PPCP	- Public Private Community Participation
WHO	- World Health Organization



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